DNR / PEI FILE EXCHANGE NOTES
August 3, 2005

Attendees:
Verne Schrunk – DNR
Ken McFadden –PEI

- **POLICY/GUIDANCE AND/OR JUDGMENT ISSUES:**

8LTC10, Casey's General Store, Mapleton, RT2 (2nd rev), HR, P1, 2/01 RT2 accepted HR/CADR due, CADR never submitted, FP detected, 9/03 DNR letter reject SMR-site remained HR/CADR due, 2/04 Consent/AO –no CADR, 6/18/04 teleconference, 3/2/05 teleconference and summary, various DNR emails (refer to file) post "Teleconference" RT2 submitted. "Reject" letter format considered and warranted based on def's , however due to site specifics/history a modified 'teleconference letter was prepared. (Rev-KP, QA-KM).

Selected section as presented in the draft RP letter:

Note to DNR: CGP did not apply percent reduction. However, when percent reduction is applied and MW-5/MW-B (4.7 ppm benzene) is used as the soil source, it appears the SL-PGWS pathway becomes NAR. Refer to issue #2.

Note to DNR: Reject letter template was considered and is warranted due to deficiencies contained herein. However, a modified teleconference (second) letter format was chosen. Refer to 2nd paragraph "For DNR review" for additional reasons.

Note to DNR: A high risk interim SMR was never submitted for year 2004. Refer to "For DNR review" issue #11. As such and due to >20% increase in groundwater benzene concentration noted, it appears a SMR/RT2 Appendix 12 report format would have been appropriate. However, only a RT2 was submitted. We did not list report format as an issue or deficiency considering the department's 3/2/05, 6/3/05 e-mails and 6/15/05 e-mail "… requiring a revised T2 SCR …".

For DNR review: We are accepting with reservations the revised Tier 2 SCR for accuracy and completeness and are relying on (your CGP) for compliance with the DNR's rules and guidance. The site is classified **high risk**.

For DNR review: Due to site specific situation (initial teleconference conducted 3/2/05, CADR reviewed, corrective action identified and high risk DWW receptor) the department accepts the revised Tier 2 in the interest of moving the corrective action phase forward. However, due to the nature of the deficiencies (soil source issue) which may affect the corrective action (sewer relocation outside the actual/RID plumes scheduled for completion by 11/1/05) the department requires resolution of the deficiencies prior to implementation of the corrective action.

- The DNR has scheduled a teleconference for **[insert date]** to discuss the deficiencies identified in the revised report and the next phase of this project. You are invited to participate in this teleconference which will include staff from the DNR, a representative from **[funding source]**, and a certified groundwater professional of your selection. If you are unable to participate in the teleconference please inform the DNR as soon as possible.

The DNR has identified some technical problems in the revised Tier 2 SCR. Be aware the comments and problems noted below may affect pathways, receptors, risk classification, site-specific target levels (SSTLs), and the proposed monitoring plan. Your certified groundwater professional should be prepared to discuss how these deficiencies will be addressed during the teleconference.

1. The title page to the report is not signed by the Responsible Party. Please provide a signed by the RP and dated report title page.

2. The soil source location and maximum concentration used for the site reevaluation are questioned. The soil source MW-5 was resampled again on 4/25/05 (4.7 ppm benzene, MW-B) as agreed in the 3/2/05 teleconference discussing the corrective action phase. Percent reduction was not applied to soil data resulting in the incorrect soil benzene maximum (BH-3, 7 ppm benzene, 12/10/90). Percent reduction should have been applied to all soil data at the site collected prior to 2005. Please apply percent reduction factor to soil data. Reevaluate pathways and receptors as necessary. Revise all affected Tier 2 sections, tables and maps.

3. The soil gas questions in the software are not answered correctly. Soil gas sampling (SG-1) at the soil and groundwater source MW-5 was conducted and failed. The software questions should have been answered appropriately to reflect soil gas failure. Please revise the software, Tier 2 Data Before Modeling section, Preliminary Pathway Evaluation Requirements and Tier 2 Receptor Summary tables. Refer to deficiency #2 above regarding the soil source issue. Note: since soil gas failed at the groundwater and soil source, the Soil Leaching to Groundwater Vapor to Enclosed Space potential pathways should have been classified low risk. Please revise the Soil Leaching Tier 2 Receptor Summary table.

4. **For DNR review:** Groundwater Ingestion – DWW pathway evaluation is questioned. Drinking water well DWW-1 was identified as high risk in the Tier 2 evaluation accepting the site as high risk (2/1/01 department's letter) and in the high risk interim SMR received 7/25/03. DWW-1 is not listed in the software and in any of the Tier 2 Receptor Summary tables. No explanation for removing DWW-1 from the Tier 2 evaluation was provided. Please clarify/explain/revise as necessary.

Refer to deliverables letter for additional def's, issues and For DNR review items.

8LTX59, Former Clark Station, Clinton, RT2 (3rd rev), non-granular bedrock, HR, P1, multiple site specific issues (Premcor sold site to National Petroleum, sold to Wisconsin North LLC ---new gasoline release occurred while under NP/WiscN.LLC, sold to Counrtywide Holdings LLC, various legal matters, consent agreement, letter and verbal agreements—simply refer to file, UST Closure report, Dispenser OE report. "Teleconference" letter format considered due to site history, however, reject RP letter template format used due to several core issues (soil source/soil sampling, soil gas/vapor plume definition incomplete, other soil gas/vapor issues, GWI-PWSW pathway evaluation incomplete, GWI-NDWW issues). Reformat letter at your discretion. Draft letter addressed to both Countrywide Holdings and Premcor. (Rev-EM, QA-KM).

Selected sections as presented in the draft RP letter:

1. **For DNR Review:** The soil samples collected on 3/24/2005 (LS6R, B7R, B6R) following the over excavation are questioned. The soil samples were not sent to the laboratory within the allowed 72 hours. According to the Chain of Custody, the laboratory samples were not sent until 3/28/2005. Please provide documentation of how the samples were preserved from collection time until submitted for transport to the

laboratory. Furthermore, pending preservation documentation, whether the laboratory results are representative of site conditions are questioned. Provide justification and explanation that the soil sample laboratory results are representative of site conditions. If adequate documentation and justification can not be provided, the sample results will be considered invalid. (Resample B6R and B7R will be necessary.) Refer to the following deficiency #3 below concerning LS6R. Please conduct soil borings and sample at the highest PID reading within 5 feet of the location of the soil samples collected for the B6R and B7R. Address and revise all affected Tier 2 sections.

2. The soil gas monitoring well SW-2 has not been cleared. The soil gas sample collected 6/2/2005 cannot be considered a "Confirmation" sample because SW-2 has been sampled more than once. A confirmation well was not constructed within 5 feet of SW-2/MW2. Refer to the Groundwater Professional Bulletin Board web posting dated 6/20/2001. Please either install a new soil gas well in accordance with guidance and perform confirmation soil gas sampling or recontour the soil gas plume presenting SW-2 as exceeding the soil gas benzene target level. Provide all required Tier 2 elements.

3. **For DNR Review:** The soil source is inadequate. LS6R does not replace LS6-Sen. LS6R was not sampled greater than 6 months after the over excavation/pipe line removal/UST tank removal. Also, refer to deficiency #1, above. Please ignore LS6R, address, and revise all affected Tier 2 sections.

4. The Groundwater Vapor to Enclosed Space pathway evaluation is incomplete. The Soil Gas Contamination Plume is not defined. The soil gas location SW-3 with 2,510,000 ug/m^3 benzene has exceeded target level of 600,000 ug/m^3 benzene. No soil gas wells exist to the east of SW-3. As such, the soil gas contamination plume is not defined to the East. Please install a soil gas monitoring well(s) to adequately define the soil gas contamination plume and complete the Groundwater Vapor to Enclosed Space pathway evaluation. Provide all required Tier 2 elements and report sections.

Refer to letter for def #5

6. The Groundwater Ingestion to Water Supply Wells pathway evaluation is incomplete. "Summary of Pathway Evaluations", page 7, computed "risk" is "CNE" (can not evaluate) in the Groundwater Ingestion to Public Water Supply Well row. Additionally, "Water Supply Wells: Classification at Receptor" presents "no data". The Public Water Supply Wells within one mile of the Groundwater Source were not sampled. Refer to the Groundwater Professional Bulletin Board web posting dated 11/3/2004. Please sample (other plausible options exist per Groundwater Professional Bulletin Board web posting), incorporate into the Tier 2, and complete the pathway evaluation. (Note: The "Tier 2 Bedrock Data Summary" page 4, "Public Water Supply Wells within 1 mile" presents "no" and is contrary to page 7 and the software file 'questions'. Provide a revised page 4 which presents "yes" to the "Public Water Supply Wells within 1 mile" question.)

Refer to draft letter for def's 7-15

16. The Abandoned Water Well Plugging Records for #1029 (Eppley Hotels Company), #1967 (Curtis Company, Inc. #2), and #1782 (Pillsbury Feed Mill #2) are not provided. The water wells are listed in the accepted Tier 2 received 4/18/2001. Note: The Potential Receptor Summary Table has "Yes" for "Plugged drinking water well(s)? [1,000']" and "Plugged non-drinking water well(s)? [1,000']". Please provide appropriate well plugging documentation. (Note: If documentation is not or can not be provided, evaluate the nondrinking water wells through normal bedrock procedures.)

Refer to file deliverables, draft RP letter for additional text, details, issues and def's.

8LTF05, Sherwood Phillips 66, Windsor Heights, Revised T2 and SMR, HR, P3, previously accepted HR 12/00 CADR due but never received, SMR reclass 10-5-04 DNR letter which also req'd RT2 due to >20% increase/flagged. Recommend reject. "Teleconference" letter format considered (and remains on option), however, reject letter template used due to site specifics. (Rev-MH, QA-KM).

Selected section as presented in the draft RP letter:

Note to DNR: 'Teleconference' letter format considered. However, due to Inadequate def/issue #3a listed below (also refer to 10-5-04 def. #3), timing (e.g. currently in 3rd quarter, as such, B10/MW-54 may (or may not) have been already sampled), CGP alluding to performing soil gas at GW source (see 'For DNR Review' in Inadequate def. #3a and def. #4) which may or may not result in reclassification of the only HR pathway (GVES), the reject letter template was used. Other plausible options apparent (e.g. Teleconference letter format w/ RT2 required prior to teleconference date (therefore if GVES reclassified from H2L, teleconference could be canceled). Reformat letter at your discretion.

(Refer to draft RP letter/deliverables for additional text…)

Based on our review, deficiencies listed in the 10-5-04, DNR letter rejecting the 2001, 2002, and 2003 SMRs have not been adequately addressed. Inadequate responses in the *Revised* Tier 2 SCR are identified below and are listed in the same order as deficiencies listed in the 10-5-04, review letter.

Regarding the 2003 SMR:

Note to DNR: Please review 10-5-04 def. #3 for specifics and details. Deficiency # 3a. **Inadequate.** The department acknowledges the explanation given that 2004 site monitoring had already been completed by the time the department's 10-5-04 letter was received. However, a groundwater sample at B-10/MW-54 was required *prior to* submission of the revised Tier 2 SCR because sampling at this point would inevitably change the groundwater source concentrations (and most likely the source location) reported in the revised Tier 2 SCR. Currently, the software identifies the May 1991 groundwater sample from B-10/MW-54 as the benzene (26,300 ug/L) and xylene (18,400 ug/L) groundwater source. As stated in the department's original deficiency, "the department seriously questions basing Tier 2 pathway evaluations on a groundwater benzene maximum that was measured more than 13 years ago." Therefore, please sample groundwater at B-10/MW-54 for all chemicals of concern and incorporate the results into the revised Tier 2 evaluation. Revise and resubmit all affected sections of the revised Tier 2 report and software. **For DNR Review:** (Be advised groundwater at well B10/MW-54 shall be sampled, lab reports received and the groundwater Benzene, Toluene, and Ethylbenzene sources identified prior to performing any vapor sampling.)

A Tier 2 SCR is considered to be complete if it contains all the information and data required by the department's administrative rules and guidance regarding Tier 2 evaluations and reporting. The revision of the Tier 2 SCR is incomplete and unacceptable due to the preceding and following deficiencies:

Refer to draft RP letter/deliverables for Def's 1 and 2….

3. The Tier 2 Data Before Modeling page (p. 4), Soil Gas Table is incorrect. The software Soil Gas questions pertaining to soil gas sampling at the groundwater source were answered incorrectly. Groundwater source locations have changed since soil gas samples were collected. In the Soil Gas table, the benzene and ethylbenzene groundwater sources should present "No" under the 'Sampled Soil Gas' columns with the 'Result' columns left blank. However, pending resolution of Inadequate deficiency #3a previously listed above, please ensure the software Soil Gas questions are appropriately answered and the Soil Gas table revised accordingly.

4. The Risk Justification and Corrective Action Proposed (RJCA) page (p. 19) is incorrect and incomplete. Soil gas monitoring at the groundwater source is listed as the corrective action for the high risk ASSNR receptors. Soil gas monitoring **is not** considered corrective action and should be done as part of the Tier 2 SCR after groundwater at B10/MW-54 has been sampled, results received and the groundwater Benzene, Toluene, and Ethylbenzene sources resolved. Refer to Inadequate deficiency #3a. Please provide an adequate corrective action for the high risk ASSNR receptors on the RJCA page and revise all other affected Tier 2 report sections (i.e. Soil Gas Monitoring Plan Table). Additionally, the lowest source SSTLs given for the Potential Confined Space (4774 ppb benzene) and Potential Sanitary Sewer (9547 ppb benzene) pathways are incorrect. Currently, according to SSTL tables in the report, the correct values are 4780 ppb and 9550 ppb benzene respectively. However, pending resolution of Inadequate deficiency #3a previously listed, please provide the correct lowest source SSTLs on the revised RJCA page.

Refer to file deliverables, draft RP letter for additional text, details, issues and def's.

8LTB96, Woodbury County Maintenance Facility, Salix, Reclass SMR L2N (4), draft RP letter/deliverables in accept/NAR letter format as monitoring certificate (Teh-d) requirements met. However, 6/00 monitoring certificate is questioned as OA-1 /BTEX not included. Refer to Memo to DNR included with the deliverables file and presented herein (Rev-KP, QA-KM).

Memo to DNR as included in deliverables file:

DNR accepted a revised Tier 2 and issued a LR monitoring certificate in a letter dated 6/8/00. The Tier 2 at risk pathway/receptor was GWI-PGWS for TEH-d (TEH-d groundwater source concentration 82020 ppb). Gasoline and diesel were stored on site. Two active municipal/city wells MWS#1 and MWS#2 are approximately 400 ft due north and downgradient of the subject site. (The wells were not within any group OA1 or OA2 RID plumes and, therefore, NAR at Tier 2).

The 6/8/00 issued monitoring certificate did not include BTEX as groundwater analytical parameters. Only TEH-d was included and identified. As a result the 2001-2004 SMRs contain no BTEX groundwater analytical data.

Our understanding is that BTEX analysis is always a necessary and required analytical parameter for at risk groundwater pathways/receptors during monitoring. As such the 6/8/00 monitoring certificate should have included BTEX as analytical parameters in addition to TEH-d. Groundwater sampling and analytical parameters as outlined in the monitoring certificate have been satisfied. The monitoring certificate requirements have been met. Exit monitoring criteria has been met for TEH-d.

As such, the draft RP letter is in "accept" format.

However, considering BTEX analytical parameters should have been included in the monitoring certificate, the proximity of the two active city wells and to be protective of human health, PEI recommends groundwater sample collection from MW-2 and MW-7 to be analyzed for BTEX.

If the department concurs with the recommendation, the draft RP letter should be modified/revised from the "accept/NAR" to other suitable format requiring additional groundwater sampling.